

**THE BEHAVIOR OF PROFIT OF MUSHARAKAH
MUTANAQISAH HOMEOWNERSHIP
PARTNERSHIP BY THE CASE OF ABANDONED
HOUSING PROJECT IN MALAYSIA**

FARHANA SYED AHMAD

**UNIVERSITI SAINS MALAYSIA
2016**

**THE BEHAVIOR OF PROFIT OF MUSHARAKAH
MUTANAQISAH HOMEOWNERSHIP
PARTNERSHIP BY THE CASE OF ABANDONED
HOUSING PROJECT IN MALAYSIA**

by

FARHANA SYED AHMAD

**Thesis submitted in fulfillment of the requirements for the degree of
Master of Science (Statistics)**

SEPTEMBER 2016

ACKNOWLEDGEMENT

In The Name Of Allah The Beneficent The Merciful

Allahumma Salli 'ala Sayyidina Muhammadin wa Aalihi Wasallim

Alhamdulillah, All Praises and Thanks be to Allah S.W.T

I would like to express my sincere gratitude to my supervisor Dr. Shamsul Rijal Muhammad Sabri for his constant support, guidance, continuous encouragement, patience and constructive ideas throughout my research work. I owe the debt of gratitude to you Dr, Thank you very much.

I would like to express my sincere appreciation to entire staffs in School of Mathematical Science (USM) Pulau Pinang, for their support and encouragement for the whole period of study. I will not forget their help and support.

My special thanks and gratitude to the Institute of Postgraduates Studies (IPS) USM, for their financial and moral support.

My deepest sense of gratitude for my dearest Mother who is always guides me to be a better person in life and always be my cheerleader. Umi, you are my inspiration and my source of strength and happiness.

Warmest thanks for my siblings for their patience and their unconditional love and trust .

For my friends in USM, I will miss the time we spent together. Thank you so much.

“Educating the mind without educating the heart is no education at all” Aristotle

TABLE OF CONTENTS

ACKNOWLEDGEMENT	ii
TABLE OF CONTENT	iii
LIST OF TABLES.....	vi
LIST OF FIGURES.....	v
LIST OF ABBREVIATIONS.....	xi
LIST OF SYMBOLS.....	xii
ABSTRAK	xii
ABSTRACT	1
CHAPTER 1: INTRODUCTION	
1.1 Background	1
1.2 Aim and Objectives.....	4
1.3 Research Questions	5
1.4 Research Rationale and Motivation	6
1.5 Significance of Study	7
1.6 Organisation of the Study	8
CHAPTER 2: PREVIOUS STUDY ON ABANDONED HOUSING PROJECT AND ISLAMIC HOME FINANCING	
2.1 Introduction.....	10
2.2 The Abandoned Housing Project Issue in Malaysia	11

2.3 The Islamic Home Financing: Abandoned Housing Project.....	15
2.3.1 The Time Value of Money.....	15
2.3.2 Islamic Home Financing.....	17
2.4 Some of <i>Musharakah Mutanaqisah</i> Studies by the Case of Abandoned Housing Projects	22
2.5 Conclusion	26

CHAPTER 3: MATHEMATICAL PRELIMINARIES AND RESEARCH METHODOLOGY

3.1 Introduction.....	28
3.2 Mathematical Finance Approach	29
3.3 Risk of Abandoned Housing Projects in MMP Facility	36
3.4 Actuarial Modelling of Perspective and Retrospective Method	44
3.5 A Simulation Modelling	48
3.5.1 Simulation Development for the Retrospective Method	48
3.6 Conclusion	52

CHAPTER 4: THE BEHAVIOR OF PROFIT OF MMP HOME FINANCING

4.1 Introduction.....	54
4.2 Description of the Model	55
4.3 Result and Finding	57
4.4 Conclusion	60

CHAPTER 5: ANALYSIS OF PROFIT OF MMP HOME FINANCING BY RETROSPECTIVE ACTUARIAL METHOD AND SIMULATION MODEL

5.1 Introduction.....	61
5.2 Result and Finding	64
5.3 Conclusion	71
 CHAPTER 6: THE IMPACT OF THE FAILURE RATE TO THE TOTAL PROFIT OF MMP HOME FINANCING BY THE RETROSPECTIVE STUDY	
6.1 Introduction.....	73
6.2 Result and Finding	75
6.2.1 Total Profit Analysis on Number of Purchasers	75
6.2.2 Total Profit Analysis on Term of Tenures	80
6.3 Analysis of Outliers	86
 CHAPTER 7: IMPLICATION AND CONCLUSIONS	
7.1 Introduction.....	87
7.2 Reflecting on the Findings of the Research	87
7.3 Research Implication and Recommendation	87
7.3.1 Implication for Knowledge Generation and Development.....	89
7.3.2 Implication for Financiers and Islamic Bankers	90
7.3.3 Implication for Purchasers of Islamic Banks	91
7.3.4 Implications for the Society as a Whole	92
7.4 Limitation of the Research.....	93
7.5 Suggestion and Future Research	94
 REFERENCES	 95
 LIST OF PUBLICATIONS.....	 102

LIST OF TABLES

		Page
2.1	The number of projects that considered to be abandoned by June, 2005	11
2.2	Yearly Statistics of the Abandoned Housing Project	12
2.3	The differences and similarity between BBA and MMP Home Financing in Malaysia	20
3.1	The profit and probability of abandoned housing project calculated with an actuarial method	46
3.2	The profit and probability of abandoned housing project calculated with an actuarial method	46
4.1	The probabilities of failures of exponential distributions	55
5.1	IB's profits (Ringgit Malaysia) that providing MMP facility of RM 200,000 financing amount for each hundred purchasers. The μ 's are from 0.01 to 0.10, with fixed monthly rental rate and return rate	65
5.2	IB's profits (Ringgit Malaysia) that providing MMP facility of RM 400,000 financing amount for each	68

hundred purchasers. The μ 's are from 0.01 to 0.10, with
fixed monthly rental rate and return rate

6.1 The probabilities of number losses from number of 84
profits gained in the simulation result that run with 100
replications with difference tenures

LIST OF FIGURES

		Page
2.1	Structure of Bai' Bithaman Ajil (BBA) House Financing	18
2.2	Structure of Musharakah Mutanaqisah homeownership housing finance	19
3.1	Time diagram of monthly installment for n-years	31
3.2	The simulation steps	48
3.3	A Framework for Conceptual Modelling	50
4.1	The plot of the probability of loss The x-axis is defined as the value of μ 's from 0.01 to 0.10. The y-axis is defined as the size of debtors (from 1 to 50) committing into this facility.	57
4.2	The plot of the probability of loss the bank. The x-axis is defined as the value of μ 's from 0.01 to 0.10. The y-axis is defined as the rental rate (i)	58
4.3	The plot of the probability of the bank .The tenure is from 5 years to 30 years as for the Y-axis. The x-axis is defined as the values of μ from 0.01 to 0.1.	59
5.1	The plot of the overall profit.The x-axis defined as the values of μ from 0.01 to 0.10. The y-axis is defined as the <i>n-th</i> terms of financing tenure, 10 years to 25 years.	68
5.2	The plot of the overall profit of RM400,000 financing amount.The x-axis defined as the values of μ from 0.01	70

	to 0.10. The y-axis is defined as the n -th terms of financing tenure, 10 years to 25 years	
6.1	The x-axis is defined as tenure which are allocated differently from 10 to 20 years. The y-axis is the rate of failure and the z-axis is the total profit for IB's.	74
6.2	The x-axis is defined as tenure which are allocated differently from 10 to 20 years. The y-axis is the rate of failure and the z-axis is the total profit for IB's.	76
6.3	The x-axis is defined as tenure which are allocated differently from 10 to 20 years. The y-axis is the rate of failure and the z-axis is the total profit for IB's.	77
6.4	The x-axis is defined as tenure which are allocated differently from 10 to 20 years. The y-axis is the rate of failure and the z-axis is the total profit for IB's.	78
6.5	The x-axis is the failure rate from 0.01 to 0.1 and the y-axis are the total profit for 50, 100,150 and 200 purchasers.	80
6.6	The x-axis is the failure rate from 0.01 to 0.1 and the y-axis are the total profit for 50, 100,150 and 200 purchasers.	81
6.7	The x-axis is the failure rate from 0.01 to 0.1 and the y-axis are the total profit for 50, 100,150 and 200 purchasers.	82
6.8	The y-axis is the probability of losses the IB will suffer if the outliers included into the simulation study.	84

LIST OF ABBREVIATIONS

A.P.R	Annual Percentage Rate
B.B.A	<i>Bai' Bithaman Ajil</i>
B.N.M	Bank Negara Malaysia
I.B	Islamic Bank
M.H.L.G	Ministry of Housing and Local Government
M.M.P	<i>Musharakah Mutanaqisah Partnership</i>

LIST OF SYMBOLS

$\ddot{a}_{n i}$	Annuity immediate at time n
F	Financing amount (RM)
i	Interest rate or profit rate
$i^{(12)}$	Effective annual interest or profit rate
k	Duration at k -th time
n	Tenure of the financing (years)
P	Installment of an annuity immediate at n -th time
P_x	Probability that x survive
q_x	Probability that (x) fail
q_0	Probability of failure at initial time
r	Rate of return fixed by the bank
$r^{(12)}$	Effective annual rate of return
$\ddot{s}_{n i}$	The future value of an annuity at time n
T_x	Time during failure of (x)
t	Duration of a particular event (years)
x	The period of a project or project's lifetime
μ	Rate of parameter (failure rate)
λ	Rate of parameter (failure rate)

**PERLAKUAN KEUNTUNGAN DALAM KEMUDAHAN PEMILIKAN
SECARA PERKONGSIAN MUSHARAKAH MUTANAQISAH MELALUI
KES PERUMAHAN TERBENGKALAI**

ABSTRAK

Amalan projek perumahan di Malaysia adalah membimbangkan kerana sistem pembiayaan perumahan melaksanakan kontrak jual kemudian bina. Hal ini dipercayai menjadi faktor utama yang membawa kepada projek perumahan terbengkalai. Sistem ini membolehkan jualan dibuat daripada pemaju kepada pembeli sebelum projek perumahan selesai. Isu utama daripada projek perumahan terbengkalai adalah apabila ia melibatkan sistem pembiayaan Islam terutamanya pada kemudahan Bai 'Bithaman Ajil (BBA). Daripada kajian kes di Malaysia, sebahagian besar pembeli rumah dalam pembinaan kecewa dengan sistem perbankan Islam kerana projek perumahan terbengkalai tiba-tiba berlaku dan mereka perlu menanggung kerugian dan menghadapi lebih banyak kesukaran untuk menyelesaikan masalah ini secara sah. Bank Islam tidak boleh membiarkan penghutang untuk menghadapi kerugian semata-mata kerana setiap pihak bertanggungjawab untuk menjual hak yang gagal menyiapkan dalam tempoh. Tambahan pula, bank Islam dipercayai oleh masyarakat untuk membawa keadilan dan belas kasihan kepada rakyat kerana ia menyediakan amalan yang sah dan beretika mengikut Syariah. Ulama memperkenalkan Musharakah Mutanaqisah Homeownership (MMP) sebagai kemudahan pembiayaan perumahan alternatif menggantikan BBA. Walau bagaimanapun, dari sudut pembiaya pandangan, masih ada kebarangkalian projek perumahan terbengkalai akan berlaku ke kemudahan

MMP itu. Walau bagaimanapun, tidak ada kaedah khusus untuk mengira risiko tertentu dan kesannya ke arah keuntungan bank. Penemuan utama kajian ini adalah satu pendekatan yang kritikal untuk kemudahan MMP pada pembiayaan perumahan Islam bagi memastikan bank menyediakan sistem pembiayaan yang yakin dan selamat kepada masyarakat dengan pendekatan matematik seperti kaedah matematik kewangan dan matematik aktuari sebagai keutamaan mata pelajaran, kerana tidak ada lagi penyelidikan mengenai pelaksanaan kaedah tertentu untuk kemudahan MMP yang sesuai dan mengimbangi amalan pembiayaan Islam dan amalan menjual rumah-rumah yang belum siap di Malaysia. Berdasarkan penemuan ini, boleh disimpulkan bahawa jumlah kerugian sentiasa sepadan dengan kadar kegagalan atau kebarangkalian projek perumahan terbengkalai. Tambahan pula, ia menyumbang dengan ketara kepada pengetahuan dan kemahiran membuat keputusan berasaskan risiko bagi sudut pandangan ahli akademik, ahli kewangan, pemaju perumahan, pengguna dan masyarakat. Pembangunan model simulasi yang disediakan oleh kajian ini adalah untuk mengkaji kesan pelbagai pembolehubah seperti kadar kegagalan dengan keuntungan bank. Kajian ini akan dapat menggambarkan realiti dan maklumat yang penting untuk pembiaya supaya bersedia dan terurus sistem pembiayaan mereka walaupun kegagalan projek perumahan terbengkalai boleh berlaku bila-bila masa.

THE BEHAVIOR OF PROFIT OF MUSHARAKAH MUTANAQISAH HOMEOWNERSHIP PARTNERSHIP BY THE CASE OF ABANDONED HOUSING PROJECT IN MALAYSIA

ABSTRACT

The practice of housing project in Malaysia is worrisome because housing financing system implement the sell-then-built contract. This is believed to be a major factor that leads to the abandoned housing project. The system let the selling made from the developer to the purchaser before the housing project is complete. The main issue cause from the abandoned housing project is when it involving the Islamic financing system particularly on *Bai' Bithaman Ajil*(BBA) facility. From the cases study in Malaysia, most purchasers of houses under construction were disappointed with the Islamic banking system because of the abandoned housing project is suddenly occurred and they have to suffer the losses and facing more difficulties to solve the problem legally. The Islamic bank should not let the debtors to face the losses alone because each of the parties responsible for selling the rights which failed to complete in duration. Furthermore, the Islamic bank is trusted by the society to bring justice and compassion for the people as it provides legitimate and ethical practice following the *Shariah*. Scholars introduce Musharakah Mutanaqisah Homeownership (MMP) as an alternative home financing facility replacing the BBA. Nevertheless, from the financier's point of view, there is still a probability of abandoned housing project will occur to the MMP facility. However, there is no specific method to calculate this

particular risk and its impact toward the profit of the bank. The main finding of this research is a critical approach for the MMP facility on the Islamic housing finance to ensure the bank provided a convinced and secure financing system to the society with the application of mathematical approach such as the actuarial mathematics and financial mathematics methods as the precedence subjects, as there is no single research about implementing these particular methods to the MMP facility to suit and balance the practice of Islamic financing and the practice of selling the incomplete houses in Malaysia. The development of the simulation modeling prepared by this research is to investigate the impacts of various variables such as the failure rate to the profit of the bank. This research should be able to portray the reality and give significant information for the financiers to be prepared and manageable their financing system even though the failure of abandoned housing project may occur at any time.

CHAPTER 1

INTRODUCTION

1.1 Background

One of the most important basic needs (*daruriyyah*) in human life is a shelter. SezeOrman (2013) said that owning a home is a keystone of wealth for both financial affluence and emotional security. Moreover, home is not only considered as a consumption good, it is also treated as an investment good (Malpezzi, 1990). Many Malaysians will attempt to have at least one house when their financialcircumstances are stable. The main difference between houses with other basic properties such as car is its high price. Therefore, there are very few Malaysians are able to buy a property like houses by a ready money (cash), they have to find external sources to finance them which usually comes from a financial institution.

There are two types of financial institution in Malaysia, the conventional bank, and Islamic bank as a medium to help the citizen to own the houses that they need as for 2010 statistics review that 61.3 percent of the population in Malaysia practices Islam. Therefore, there is a need for the banking system in Malaysia to provide a facility for homeownership finance by the way of Islam (*Shariah*). Fundamentally, Islamic banking system in Malaysia was established to meet the financial needs without a usury (*riba*) because usury is condemned as one of the major sins that brings

vindictiveness and injustice toward the community. There are many verses in Holy Quran prescribe the usury practice. The verse on *Surah Al-Baqarah* below is the most referred verse that clearly explained that the usury practices are prohibited and trading is allowed. *“Those who charge usury are in the same position as those controlled by the devil’s influence. This is because they claim that usury is the same as commerce. However, God permits commerce and prohibits usury. Thus, whoever heeds this commandment from his Lord, and refrains from usury, he may keep his past earnings, and his judgments rest with God. As for those who persists in usury, they incur Hell, wherein they abide forever”* (Al-Quran 2:275).

The Islamic Bank (IB) in Malaysia takes one step ahead by introducing the *Bai Bithaman Ajil* home financing as *asale* with deferred price in 1983. This is a debt basis financing with the element of *bay’ inah* contract, which is the both parties will be agreed with a certain amount of financing facility that will be paid by the purchasers to the financiers on deferred basis throughout the particular tenure of financing and on the fix normally payment of monthly installment. This is the most popular and common facility for the home financing in Malaysia until present.

However, there are several issues associated with the implementation of BBA homeownership facility. Such issues include BBA global acceptability from *Shariah* point of view, prohibition of *gharar* (uncertainties) for the case of financing an uncompleted property, rebate, price and the issue of against substance which mimicking conventional housing loan (Hanafi, 2012). Furthermore, these issues lead to generate a new mode of Islamic homeownership facility which is more acceptable and reflect the character of *Shariah* by the Central Bank of Malaysia (BNM).

Based on several literatures, the Musharakah Mutanaqisah Homeownership Partnership (MMP) financing is argued to be a better Islamic financing alternative for a longer duration as opposed to BBA contract (Meera & Razak, 2005). The legitimacy of Musharakah is based on Al-Quran that generally indicates the validity of Musharakah (Yusof 'Ali, 2008): "...but if more than two, they share in third ..." (An-Nisa: 12). The element of profit and loss sharing is considered to be closer to justice and the spirit of *Shariah*. Therefore, it is deemed to be a better alternative to BBA home financing. MMP facility is arguably able to resolve some issues that are associated with BBA home financing (Hanafi, 2012).

The issue of selling uncompleted house or house under construction should be able to resolve by this new facility of MMP. More importantly the concept of MMP seems to reflect the spirit of *Shariah* as it is capable of promoting justice to the parties and removing harms that are usually associated with the debt based financing and ultimately safeguarding of a bank and its customer particularly within the issue of abandoned housing projects.

The details literature on Islamic banking system and how the Islamic bank is said to have a great responsibility towards their products that they provided compared to the conventional bank will be discussed in the next chapter.

The abandoned housing projects problem is not unique to Malaysia as it is also present in other countries e.g. United States (Hicks, 2008), Spain (Carrero et al., 2009), Dubai, Abu Dhabi, Saudi Arabia, Qatar, Bahrain, Kuwait, and Russia (SPIEGEL, 2009). However, in Malaysia, the problem has been afflicting long enough by the society and

deserves more attention (Eng Hoe, 2013). The main issue cause from the abandoned housing project is when it is involving the Islamic financing system when the purchasers entrusted the developer for completing the construction within the specific time in the agreement (Salman & Nu Htay, 2011). As explained in the previous paragraph, the Islamic financing system is believed to have ethical attributes and give a complete protection.

Based on the purchaser's understanding, when the abandoned housing project suddenly occurs during the financing period and certainly, there is an enormous loss to be swallowed, hence the Islamic bank should be able to responsible to the losses. Therefore, since MMP is relatively new in the market, the product experiences many issues surrounding its implementation which influenced its inherent capability of becoming a better home financing product (Hanafi, 2012).

The aim of this study is to examine the challenges of the abandoned housing projects toward the MMP facility and to observe the prospect of the current practices of MMP facility with a suggested mathematical modeling that will be implementing the actuarial mathematics methods.

1.2 Aim and Objectives

This research suggested a significant method for the Islamic financing system particularly in MMP facility by calculating the profit with the risk of abandoned housing projects and to answer how will the financiers willing to bear the losses if the abandoned housing project is considered while the practices of selling the incomplete house or house under construction still put into practice. It is for the

future prospect as a better home financing product, this study will implement the mathematical method to achieve a significant analysis on the current state of Islamic home financing product with the related issue of abandoned housing projects.

The objectives of the study are :

- i. To develop a significant mathematical model to measure the profit if the risk of abandoned housing project is considered by implementing some of the actuaries mathematical methods.
- ii. To critically analyze the behavior of profit and losses of MMP facility by the case of abandoned housing projects.
- iii. To explain rationally about the willingness of the bank in bearing the losses.

1.3 Research Questions

The following sub-questions are developed in order to respond to this comprehensive objectives. As the presence of doubt that the abandonment of the financed houses may occur anytime during the construction.

- i. Will the bank be able to bear the losses due to the case of abandoned housing project ?
- ii. Will the bank able to calculate the profit and losses with the presence of the uncertainties risk occur from the case of abandoned housing project ?

- iii. Are the purchasers aware of the existences of the impact of the risk of abandoned housing project towards the Islamic Financing system ? and are the expectation require by the purchasers reflected in the Islamic home financing system ?
- iv. Does this suggested method will provide a significant contribution to the society's side and Islamic financing system particularly on MMP facility ?

1.4 Research Rationale and Motivation

Several studies have been conducted by several of researchers on the abandoned housing projects and the Islamic homeownership financing system in Malaysia.

Firstly, literature advocate that the Islamic home financing must be capable of providing justice to contracting parties as this financing based more reflects the spirit of *Shariah*.

Secondly, there is no study that provided or gives a suggested method in quantitative analysis and offers a method to analysis the behavior of profit and losses as the abandoned housing project considered. Furthermore, Md. Dahlan & Kader (2011) suggested that the new modesin-house financing, such as MMP and *Ijarah*, if involved the purchases of the housing pending completion, must also

provide sufficient terms to protect the interest of the purchasers if the abandonment occurs.

Lastly, it has been argued that the Islamic bank should be responsible to the facilities that they provided especially towards the current practice of MMP homeownership facility if the houses that they traded becomes abandoned, therefore one step forward filling this gap of how will the Islamic financier with the MMP homeownership facility able to deal with the abandoned housing projects problem that suddenly occur during the financing term by studying this issue and several methods to overcomes this gap for master by research level.

1.5 Significance Of Study

This study aims to suggest a method that provide a significant information to the Islamic financiers which are not been developed in detail, as the lack of material in the literature reviews. As a result, the significance of the study mainly emerges from its response to the observed gap in the literature. These can be listed as follows:

- i. This study is an academic research of a specific instrument of mathematical modeling evidence and Islamic homeownership financing which has not been widely covered by the existing literature particularly on the method assistance.
- ii. This study offer an important element for the Islamic bankers to formulates proper strategies for made up wise decisions for Islamic bankers when they

encounter a risk-based decision-making situation particularly on MMP facility as the principles of profit and loss sharing contract.

- iii. This study helps to improve the perception and awareness of Malaysian towards Islamic home financing and their expectation towards Islamic home financing in Malaysia particularly on the issue of abandoned housing project.

1.6 Organization of the Study

This research consists of 7 chapters. Chapter 1 provides an overview of the research motivation and study. There is also a section which list the aims and objectives, research questions and the motivation of the study. A brief discussion on the significance of the study is also included in this chapter.

Chapter 2 reveals a discussion on the relevant literature. This chapter will discuss the literature based on 3 sections. The first section will present about the Islamic Financing system in Malaysia. The second section will present the literature on abandoned housing projects and the last chapter will discuss the some comparable studies from the previous researchers.

Chapter 3 presents in detail the entire research process by a focus on the method used. The first section will explain the finance mathematical model, the second section will present the life contingency modeling that will discuss the probability of abandoned housing project and the last section will present an Actuarial

Mathematics modeling that is a combination of the first section and the second section of mathematical models.

Chapter 4 provides the finding and observation on the behavior of profit mainly on the perspective calculation of profit method that has been discussed on the previous chapter of research methodology.

Chapter 5 explains a detail study of the profit by the retrospective method. The retrospective method is implementing from the actuarial mathematics is a retrospective method of calculating the profit that has been discussed on chapter 3.

Chapter 6 presents a simple analysis of the impact of outliers from the simulation modeling of the retrospective method. These study will overview the sensitivity of the total profit model towards the outliers that may exist because of the case of abandoned housing projects.

Chapter 7 concludes the research by giving contributions, limitations and recommendations to improve the practice of Musharakah Mutanaqisah Homeownership Partnership (MMP) facility in Malaysia particularly on the financier's point of view.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter reviews three dominant sections. Section 2.2 will explore the broad issue of abandoned housing project in Malaysia and the motivation in constructing this study. This section will explain the root of the problem of abandoned housing projects by the study of literature. Section 2.3 will discuss the Islamic banking system in Malaysia, particularly in homeownership facility. The next section of Section 2.4, will discuss some of the studies that focus on Musharakah Mutanaqisah Homeownership particularly in abandoned housing project cases and the importance of mathematical modeling in this research. The methods of mathematical modeling are then discussed in details in the next chapter.

2.2 The Abandoned Housing Project Issue in Malaysia

Md Dahlan (2011) stated that the abandoned housing projects in Peninsular Malaysia are one of the spillover problems of the housing industry that cause a nightmare for the affected purchasers and becomes a burdensome social obligation for the government to tackle. Since 1990 until today, the problem of abandoned housing project is indeed crucial. In Peninsular Malaysia, there are 261 projects involving 88,410 houses recorded abandoned since 1990 to 2005 by the Ministry of Housing and Local Government (MHLG). These involved 58,685 buyers were affected by this problem. Table 2.1 shows the summary of the number of the new projects which has been identified as abandoned housing projects according to States in Peninsular Malaysia as June 2005 (Md Dahlan, 2011).

Table 2.1 The number of projects that considered to be abandoned by June 2005(Division of Supervision and Enforcement, Ministry of Housing and Development and Local Government).

States	Number Of Projects	Number of Houses	Number of Purchasers	Sales Value (RM Million)
Perlis	0	0	0	0
Kedah	4	687	333	69.51
Pulau Pinang	5	2,495	1,965	125.73
Perak	3	161	106	21.47
Selangor	5	2,074	1,527	123.21
Federal Territory	0	0	0	0
Negeri Sembilan	2	123	43	23.37
Melaka	2	165	47	14.9
Johor	5	1,897	1,462	206.24
Kelantan	0	0	0	0
Terengganu	2	344	234	18.45
Pahang	0	0	0	0
TOTAL	28	7,946	5,716	479.67

Moreover, there are seven new projects have been identified as abandoned involving 1,278 purchasers, 2,114 housing units, and sales values of RM 462.14 million until December 2006 (Md Dahlan, 2011). A report from the Ministry of Housing and Local Government (MHLG) state that from the year of 2009 until May 2014 the total of abandoned housing projects is 144 projects (Ministry of Housing and Local Government,n.d). Table 2.2 illustrated the statistics figure of abandoned housing project until April 2015.

Table 2.2 Yearly Statistics of the Abandoned Housing Project (Peninsular Malaysia) from January 2009 until April 2015 (Ministry of Housing and Local Government, 2015).

Year	Current	Latest	Total
2009	144	4	148
2010	133	13	146
2011	110	6	116
2012	84	11	95
2013	60	27	87
2014	57	10	67
April 2015	52	1	53
2009 – 2015	144	72	216

The word ‘abandoned’ is defined as having been deserted or left by oxford dictionary. However in term of the certain businesses or projects, abandoned means at any stage of the lifecycle if the project incurs asignificant amount of loss the project is considered to be abandoned. However, as being suggested by Md Dahlan (2008), the definition of abandoned housing project should have been legally provided for and statutorily interpreted by Division of Supervision and Enforcement, Ministry of Housing and Local Government (MHLG) and the purpose of formulating this legal and statuary definition of abandoned housing is to guard against any abuse of duty and power by the developer concerned. Therefore, in 2011, the definition of abandoned housing project will follow the MHLG’s consideration. As been discussed by Hoe

(2013), MHLG considered that the housing project has been abandoned if (1) there has been no substantial activity for six consecutive months or (2) it is involved in winding-up petition registered at the High Court under Section 218 of the Companies Act, or (3) it is under receivership, or (4) the developer has informed the Housing Controller in writing his inability to complete the project, or (5) the project has been certified to be abandoned by the Minister under Section 11(1)(c) of Housing Development (Control and Licensing) Act 1966 (i.e. Act 118) (Ministry of Housing and Local Government, 2015).

The severe impact of the abandoned housing project to the parties that involved have been discussed and debated numerously by the professionals and also by the public. The majority of studies indicate the negative impact of abandoned housing project on house buyers (Rahman et al., 2013). Furthermore, Md Dahlan (2011) called this phenomenon of abandoned housing projects as “nightmare and grievances” of purchasers. This is because the implication of abandoned housing projects on purchasers can be categories into pecuniary and non-pecuniary losses (Rahman et al., 2013). One of the implications is the purchaser have to bear the monthly installments of housing loans or otherwise they will be blacklisted by the bank. Moreover, Md Dahlan and Aljunid (2011) also explained that the purchasers may need to use their own funds to rehabilitate the abandoned housing projects while there is no compensation for damage or default that previous developers caused and inability to take legal action against the defaulting developers. Even though house buyers suffer severely negative impact, the contractors, land owners, government, and the financiers may also be the victims. Based on Hoe (2013) the contractors may be the most severely affected victim after the house buyer because the contractors may be forced

to wind up the company just because of the failure of a collection of payment from one single project. However Hoe (2013) did not study the impact from the perspective of the Islamic financiers, his study is based on conventional financiers as general similarly with Kong (2009) that also said banks may suffer because of the bad debt. However, if the Islamic financing system involvement is being studied, they may find out that the Islamic finance suffers from the severe impact as much as the house buyers when the abandonment of the projects occurs because of the fundamental of their financing system is the difference from the conventional bank that just giving a loan to the buyers. Unlike conventional financing system, Islamic financing system should be responsible towards every house that they are financed to the buyer by following the *Syariah* commandment. Moreover in the next section the literature of the enrollment of Islamic housing finance by the case of abandoned housing project will be described.

There are several factors that contributed in the abandonment of the housing projects such as financial problems of developers; conflict; fraud; problems related to site clearing and also insolvency of developers (Md Dahlan & Aljunid, 2011). However, the main factor that leads to the abandonment of housing project is because of the practice of housing project in Malaysia. The practice of housing project in Malaysia is crucial because they implement the 'sell then build' contract. This argument was agreed by the former Minister Abdullah Ahmad Badawi (HBA 2006) and the President of Federated Association of Consumer Malaysia (FOMCA) (Khalid, 2010). Chen (2007) explained that the sell-then-build system is proposed to enable more houses to be built at a lower price and a faster rate. Moreover, there are about 41 of other factors that lead to the abandoned housing project (Yap, 2013).

The main issue cause from the abandoned housing project is when it involving the Islamic financing system when the purchasers entrusted the developer for completing the construction within aspecific time in the agreement (Salman & Nu Htay, 2011). Through Islamic Bank (IB), the purchasers are committed on monthly payment until the outstanding financing amount is to be paid and the abandoned housing project suddenly occur during the financing period, and certainly there is an enormous loss to be swallowed.

2.3 Islamic Finance

There are two concepts of financing in Malaysia. There are conventional financing and Islamic financing. The differences between conventional and Islamic financing are their fundamental concept of finance. Before the explanation of Islamic finance, the fundamental study of the time value of money in conventional and Islamic finance must be clarified.

2.3.1 The Time Value of Money

The basic principle of Islamic banking system is trading while the conventional bank is operating on interest-based money lending. The differences are in two core principles. There is the elimination of usury or called '*riba*' in Arabic word and the elimination of uncertainties or in Islamic financing terms called '*gharar*'. In the theory of capitalist, there is no difference. However in Islamic fundamental of finance the commodity can fulfill human needs directly while money has no differential quality in the sense of RM100 notes today is exactly equal to RM100 notes years later. Therefore, since the commodity is known to possess an intrinsic value and quality, the owner of

the commodity is allowed to sell it at whatever price that buyer and seller agree on (Hassan, 2014). The jurists hold that unlike trade, *riba* implies that money is loaned for self-generating or self-expanding value which is a form of sale (Engku Ali, 1998). There are many verses in Quran that mentioned about the prohibited of *riba*. The verses of Surah Al-Baqarah verse 275-281 explained as details on the prohibition of *riba* and the acceptance of trading in Islam;

“Those who consumes interest cannot stand [on the Day of Resurrection] except one stands who is being beaten by Satan into insanity. That is because they say. “Trade is [just] like interest”. But Allah has permitted trade and has forbidden interest. So whoever has received an admonition from his Lord and desists may have what is passed, and his affair rests with Allah. But whoever returns to [dealing in interest or usury] - those are the companions of the Fire; they will abide eternally therein. Allah destroys interest and gives increase for charities. And Allah does not like every sinning disbeliever. Indeed, those who believe and do righteous deeds and established prayer and give zakah will have their reward with their Lord, and there will be no fear concerning them, nor they grieve. O you who believe, fear Allah and give up what remains [due to you] of interest if you should be believers. And if you do not, then be informed of a war [against you] from Allah and His Messenger. But if you repent, you may have your principal – [thus] you do no wrong, nor are you wronged. And if someone is in hardship, then [let there be] postponement until [a time of] ease. But if you give [from your right as] charity, then it is better for you if you only knew. And fear a Day when you will be returned to Allah. Then every soul will be compensated for what it earned, and they will not be treated unjustly.”

These verses above show that the prohibition *riba* in Islam is very rigid and every Muslims should be aware. However, the knowledge of interest theory is accepted by the Islamic financiers as a method in calculating the profit rate and rental rate. Muhammad Sabri (2013) concluded that the interest theory is a contribution towards Islamic financing product as it provides a transparent calculation of installment and outstanding financing balances as also revealed by (Khan. J, 2011); (Meera & Razak 2005); (Smolo, 2011). To conclude the knowledge of time value of money theory can be used to Islamic Finance as long as the principles of finance are following the *shariah* and eliminate the usury. *Riba* (usury) is any excess amount charged against deferred payment only when money exchange with money, since the exchange charged is against nothing but time.

2.3.2 Islamic Home Financing

Islamic Housing financing is actually an alternative financial product to substitute conventional interest-based home financing modes. There are two most popular Islamic home financing in Malaysia, there are Bay Bithaman Ajil (deferred payment sale) and Musharakah Mutanqisah (diminishing partnership). Unlike Islamic system, the conventional system house financing is simply giving a loan to the buyers (Azli et al., 2011).

The fundamental of *Bai' Bithaman Ajil* is indeed very simple. From the initial point of time, the bank would purchase the property from the buyer and resell it at a profit margin to the buyer while the buyer will repay the new purchasing price on the regular installment basis as shown on Figure 2.1.

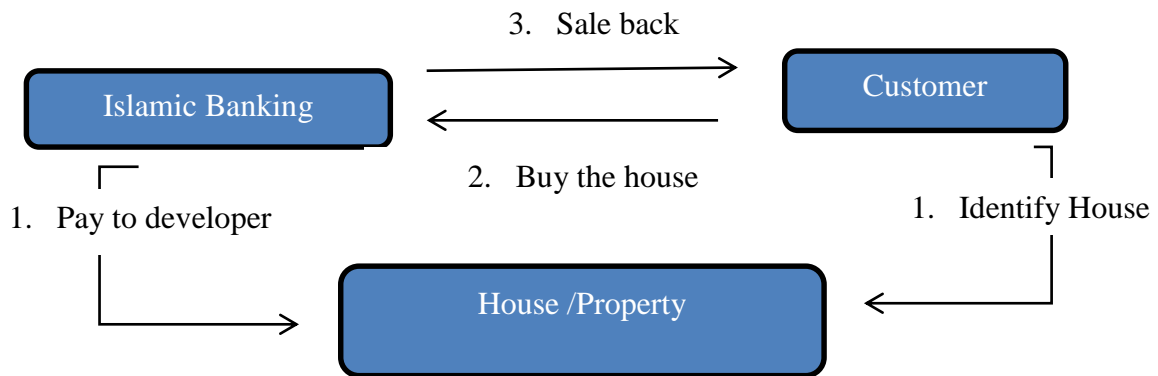


Figure 2.1 Structure of Bai' Bithaman Ajil (BBA) House Financing (Azli, et.al 2011)

However the critics on the *Bai' Bithaman Ajil* (BBA) has been raised publically even the Islamic consumer society urged the Central Bank of Malaysia (BNM) to review the legal terms in implementing such facility that was claimed to be prejudice to the purchasers especially in purchasing the properties through Islamic financing facility (Md Dahlan, 2011). Moreover, in *Shariah*, the inability of the seller to deliver the goods of sale to their buyer also form uncertainties (in this case is the abandoned housing projects) that also know in Islam as *Gharar al Fashion*. If this case occurs it will amount to non-delivery of an asset to the purchaser and this will result to the non-compliance of the requirement of the subject matter of the contract (Salman & Nu Htay, 2011). Therefore, this is contrary from the Islamic principles which are the main purpose of Islamic economic and finance is to provide human justice and prevent things which are prohibited in *Shariah* and immorality transaction as *riba* (usury), *gharar* (uncertainty) and *maisir* (gambling) (Iqbal, 2007).

In order to replace the controversy BBA, a few of financial advisors and Islamic scholars suggested the Musharakah Mutanaqisah Homeownership Partnership (MMP) as a new product. Musharakah Mutanaqisah means diminishing partnership. Firstly the

contract of MMP is a contract partnership between two parties such as the Islamic Bank and the purchasers, wherein the end, the purchaser will gradually buy the whole part of the property (Muhammad Sabri, 2013). To understand the system of MMP facility in an easier way, the diagram of MMP is shown on Figure 2.2.

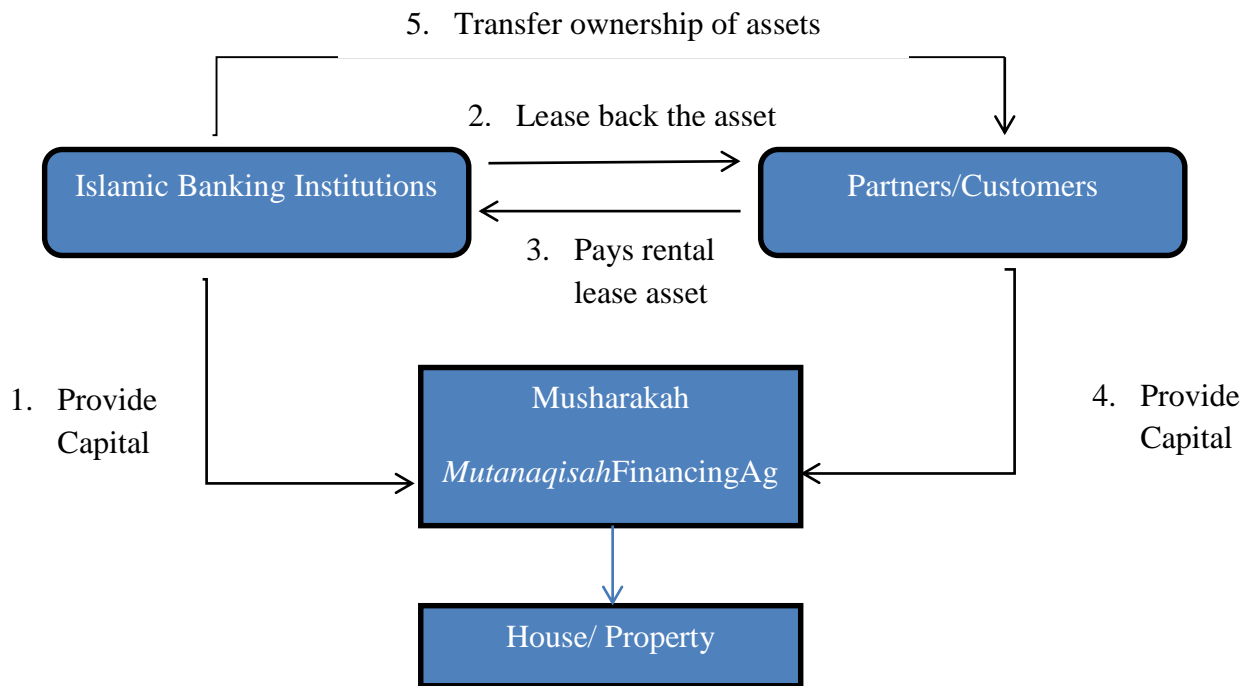


Figure 2.2 Structure of Musharakah Mutaqisah Homeownership Housing Finance

Firstly the customer will identifies the properties and normally pay 20 percent of the selling price and ask the bank to finance 80 percent. Then the customer will sign an agreement with the bank. Then the bank will buy the property and normally from the customer at a price equal to the financing amount required. The bank will pay the remaining 80 percent to the developer. Finally, the customer should agree to buy back the asset at a price equal to the financing amount plus profit charged by the bank. The amount will be paid on deferred terms based on tenure agreed and the customer will gradually own the house. Table 2.3 shows the differences and similarities between

the Islamic home financing of BBA and Musharakah Mutanaqisah Homeownership Partnership (MMP).

Table 2.3 The differences and similarly between BBA and MMP Home Financing in Malaysia (Aris & Othman et al., 2012).

Islamic Facility	<i>Bai' Bithaman Ajil</i> (BBA)	Musharakah Mutanaqisah Homeownership (MMP)
Structure	<p>Basically a deferred payment sale contract; buyer is given the benefit of the deferred payment price of sale object carries an additional profit.</p> <p>Based on Murabaha concept of cost plus contract, whereby the sale (with profit) of the property is paid in installments over along period.</p>	<p>Based on the diminishing partnership concept which consist of two portions:</p> <ol style="list-style-type: none"> 1. The purchasers enter into a partnership agreement with the bank (e.g 20:80), and gradually redeemed the banks portion until the house is fully own by the customer. 2. The purchaser agrees to pay rental to the bank. The periodic rental will be shared between the customer and the bank according to the percentage of shareholding.
Operational Structure	<p>Assist the purchaser paying the cost of financing during the tenor of the facility at fixed rate determined by the bank</p> <p>The bank buys the property from the purchasers and sells its back to the customer, plus profit margin.</p> <p>The customer does not involve the transfer of the name in the issue of adocument of title to the property which the buying last for a few second and in practice the selling back through assets sale agreement is almost immediate.</p> <p>It does not merit the concept of <i>al-Bay</i> and the purchaser is saddled with the burden of paying off the property even before it is completed as he engaged in a 'debt contract'</p>	<p>The property is owned by the customer while the bank participated as a financial partner (full or part) and the agreement are signed by the customer and the bank stipulates each party's shares of profits.</p> <p>The bank then leases the house under <i>ijarah</i>. The share then will be divided into a number of equal units and the customer promises to buy the individual units periodically until all are taken up (the principles of <i>al-Bay</i> under the MM contract).</p> <p>The bank will then agree that the <i>Ijarah</i> rental is reduced in</p>

		<p>proportion to the units purchased.</p> <p>The periodic payment constitutes a rental payment for the portion owned by the bank and a buyout of part of that ownership.</p> <p>Ownership under the MM contract is shared between the customer and the bank.</p>
Differences	<p>Debt types financing</p> <p>More complicated, and buyer only can own the property right after the full payment of the full tenor has been made.</p> <p>Recognized predominantly in Malaysia, Indonesia and Brunei.</p> <p>The selling price and the bank profit do not reflect market value since the markup for the deferred payment is quite substantial.</p> <p>The return of the BBA is based on fixed selling price</p> <p>Purchaser will always end paying almost four times the original cost as it may be aburden for the lower-income group in particular.</p> <p>Many may be of the opinion that BBA is similar to aconventional loan.</p>	<p>A joint ownership</p> <p>More flexible, can own the property earlier redeeming earlier the principle sum of the bank without the need to compute the rebates.</p> <p>It is accepted internationally as Shariah compliant.</p> <p>The value of the property always reflects market price and rental are determined by market rental values.</p> <p>The bank need not bind to a fixed profit rate throughout the financing tenor. The rental can be revised periodically to reflect the current market situation.</p> <p>There is no interest charge or advanced profit involved as it is based on the concept of rental payments and redeeming the bank's shares in the property.</p> <p>By default: 1) Partners can leave a partnership anytime, 2) The lessee in ijarah arrangement will cease to pay rent once he stops deriving benefit from the use of the property, 3) Any decision relating to the proposal of the acquired property must be approved by both Musharakah partners.</p>

Although the Musharakah Munaqisah believes to be a better alternative compare to the practice of Bai' Bithaman Ajil that highlighted several issues and lack of perseverance of public interest. There is still need to study the readiness of this new product to dealing with uncertainties event for example like abandoned housing project. Therefore, the next section will discuss some of the studies constructed particularly in explaining the Musharakah Mutanaqisah Homeownership Partnership in house financing.

2.4 Some of Musharakah Mutanaqisah Studies by the Case of Abandoned Housing Projects

Meera and Razak (2009) has contributed to point pit some practical issues that need to be addressed by the implementation of Musharakah Mutanaqisah Homeownership Partnership (MMP) facility in house financing, They have shown the impact of the rental rate of MMP facility towards the customer perspective. From their study, they conclude that the duration of the remaining contract will be extended when rental rate increase but still paying based on the old price. They also show the mathematical derivations of the MMP facility varying the rental rate in this study. This study also concludes that the computation of conventional formula can be used by MMP facility by changing the interest rate to the rental rate. The rental rate can differ among different type of houses. However, despite that this study focus on some practical issues that needs to be addressed with the implementation of MMP, the discussion about the abandoned housing project issue is not revealed. Even though this study discovered on the sensitivity of the MMP model towards the changes of the rental rate by some components but this study is alack of the discussion about the most crucial issue of abandoned housing projects in MMP facility.

Another related literature that discuss on MMP facility is by Hanafi (2012). Hanafi (2012) reveals the awareness of MMP facility in the society by surveys and interview analysis. The aim of this research is to see whether the Islamic mortgage capable of safeguarding their interest from the harm that normally associated with a conventional mortgage. This study also concludes that the public expectation on Islamic mortgage is more on the ethical or spirit and governance aspect. Therefore Hanafi (2012) suggested that the bank should improve their current practice in line with Shariah requirement by adhering to all principles of profit and loss sharing contract as part the whole construct of MMP facility. Although this study did not mention any mathematical derivation or constructed any financial model for the improvement of MMP facility, the author give signals for the Islamic financiers to provided better strategies in promoting and marketing the MMP facility by emphasizing its differences and highlighting the Islamic home financing ethical advantages that not available in the conventional banks. Even though, this study portrays a significant finding from the society perspectives that there are some excellent ethical expectation towards the Islamic home financing particularly on MMP facility. However, there is no measurements or quantitative implication provided in this study to enhances the present Islamic financing facility even if there is a momentous risk of losses that need to be bear by the Islamic home financing facility especially when dealing with the uncertainties events such as abandoned housing projects, This study is needed for the Islamic bankers to accomplish the ethical expectation following the *Shariah* requirements and society point of view.

In Islamic perspective, a study of right and responsibilities of contracting parties in Bai' Bithaman Ajil (BBA) and Musharakah Mutanaqisah (MMP) has been conducted by Mohd Azli et al., (2011). This study concludes that the selling of houses under construction, which is the sale and purchase of a non-existence of a house that is still under construction became a crucial issue by Islamic studies and it is adequate to provide the appropriate vehicle and procedures for fulfillment rights and responsibilities of contracting parties, thereby eliminating all sorts of financial criminology in trading and business (Kamali, 2002). Moreover, Md. Dahlan and Abdul Kader (2009) also has explained that the existence of *gharar* (uncertainties) is prohibited by Islam as its can harm the well-being, rights and interest of contracting parties. They also agree with Mydin Meera and Abdul Razak (2005) that the customer still has to bear all risk and cost and yet keep up with the monthly installment. The author also explained that the purchasers will not have the ability to claim the return of all paid monies to the developer and face hardship. Furthermore, Md. Dahlan & Abdul Kader (2009) also highlighted that the issue of *gharar* (uncertainties) is when the agreement issued by the financier is sufficient and contains not preventive measures. Therefore, they suggested that the Islamic financiers should provide the responsibilities and duties of the Islamic bank as the owner of the house during the course of construction. Furthermore, Abdul Razak & Md. Taib (2008) also agreed with this attitude and they propose that Islamic financier must also concern of the society's importance while promoting Islamic norm and values (Md. Azli et al., 2011). This study has to give a strong motivation in a matter of providing a preventive measurement of risks that come from the uncertainties (*gharar*) transactions such selling a house under constructions as concluded by this study that Islamic bank should responsible to the house that they trade. This study focuses on the Islamic point of